

Listing of Claims:

Claims 1-29 (cancelled)

Claim 30 (previously presented): In a method for producing expandable plastic granulate from a plastic material and a fluid blowing agent that is only partially soluble in the plastic material when the plastic material is at an elevated temperature by

heating the plastic material to the elevated temperature to form a plastic melt;

dispersing the blowing agent in the melt to form a mixture;

retaining the mixture for a predetermined time at the elevated temperature and pressure for a predetermined time interval; and

thereafter cooling and granulating the mixture,

the improvement comprising:

providing a first static mixer in which the dispersing step is carried out and which subjects the mixture to intensive shearing; and

providing a second static mixer in which the retaining step is carried out and which subjects the mixture to less intensive shearing than in the first static mixer.

Claim 31 (previously presented): A method according to claim 30 wherein subjecting the mixture to intensive shearing and to less intensive shearing comprise flowing the mixture through the first static mixer at a relatively high flow rate and flowing the mixture through the second static mixer at a relatively low flow rate.

Claim 32 (previously presented): A method according to claim 30 wherein subjecting the mixture to intensive shearing in the first static mixer comprises providing the first static mixer with a relatively small cross-sectional flow-through area and wherein subjecting the mixture to less intensive shearing in the second static mixer comprises providing the second static mixer with a relatively large cross-sectional flow-through area.

Claim 33 (previously presented): A method for producing expandable plastic granulate from a plastic material and a fluid blowing agent comprising
melting the plastic material at an elevated temperature to form a melt and

subjecting the melt to an elevated pressure;

providing first and second, serially arranged static mixers, the first static mixer having a relatively smaller cross-sectional flow-through area and the second mixer has a relatively larger cross-sectional flow-through area;

injecting the blowing agent into the melt to form a flowable mixture;

flowing the mixture serially through the first and second static mixers wherein the smaller cross-sectional area of the first static mixer subjects the mixture to relatively high intensity shearing as the mixture flows through the first static mixer and the larger cross-sectional flow-through area of the second static mixer subjects the mixture to relatively less intense shearing as the mixture flows through the second static mixer; and

thereafter cooling the mixture and forming expandable granulate therefrom.